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A.W.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Burger et al.

Group Art Unit: 2177

Serial No.: 09/258,123

Examiner: Robinson, Greta Lee

Filed: February 26, 1999

For: **METHOD, STORAGE MEDIUM AND SYSTEM FOR
ELECTRONICALLY VIEWING MULTI-PAGE DOCUMENTS WHILE
PRESERVING APPEARANCE OF PRINTED PAGES**

Attorney Docket No.: 00-VE20.56

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APPEAL BRIEF

Technology Center 2100

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Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

This appeal is from the decision of the Primary Examiner dated October 24, 2003 ("Final Office Action") finally rejecting claims 1-12, 25-53, and 68-84, which are reproduced as an Appendix to this brief. The Notice of Appeal was filed on April 20, 2004 under a three month extension of time. This application was filed on February 26, 1999. Submitted herewith are two additional copies of this Appeal Brief.

I. REAL PARTY IN INTEREST

The real party in interest is Verizon Services Corp., Assignee, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 1095 Avenue of the Americas, New York, NY 10036.

II. RELATED APPEALS AND INTERFERENCES

Appellants are not aware of any related appeals or interferences that would affect the Board's decision on the current appeal.

III. STATUS OF CLAIMS

Claims 1-12, 25-53, and 68-84 are pending. Claims 1, 25, 40, and 68 are independent claims. The Office Action rejected claims 1-12, 25-39, and 68-84 under 35 U.S.C. § 112, first paragraph. (Office Action, paragraph 5.) Further, the Office Action rejected claims 1-12 and 40-53 under 35 U.S.C. § 112, second paragraph.¹ (Office Action, paragraph 7.) The Final Office Action did not make any rejection of Applicants' claims based on the prior art of record.

IV. STATUS OF AMENDMENTS

On March 24, 2004 Appellants filed claim amendments to claims 25, 43, 68, and 71 pursuant to 37 C.F.R. § 116. In the Advisory Action mailed on April 2, 2004 the Examiner indicated that these amendments would be entered for purposes of appeal.

V. SUMMARY OF THE INVENTION

The present invention is directed to a system and method for preparing and distributing an electronic version of a printed document that preserves the appearance of the printed pages, and is further directed to a persistent electronic storage medium on which such an electronic version is distributed. In particular, the present invention includes an electronic Yellow Pages viewer and an electronic billing system including a tear sheet. Accordingly, one object of the present invention is to preserve the appearance of a printed page of a Yellow Pages directory. (Specification, page 1, lines 5-10.) The Yellow Pages viewer allows a user to view a desired page in the Yellow Pages directory. (Specification, page 18, lines 7-9.)

¹ Claims 20 and 57-60 have been cancelled, and therefore Appellants presume that the Examiner did not intend to include a rejection of claims 20 and 57-60 in the Final Office Action, even though paragraph 7 of the Final Office Action refers to them. Further, claims 71-74 depend from independent claim 68, which the Final Office Action did not reject under the second paragraph of Section 112, and Appellants therefore assume that the Examiner did not intend to include a rejection of claims 71-74 in the Final Office Action, even though paragraph 7 of the Office Action refers to them.

A Yellow Pages publisher typically produces printer data for output by an image setter. For example, a print composition process might build and paginate encapsulated PostScript (EPS) files, each of which the image setter converts into a printed page. Thus, to obtain files for use with the electronic viewer of the present invention, a virtual print queue containing those files is intercepted at the point at which those files are sent to the image setter. (Specification, page 8, lines 11-17.)

Each EPS file is removed from the print queue and archived. Each EPS file is then rasterized to convert it into a bitmapped file. The resolution of the bitmapped file should be sufficient to allow legibility of the text on screen and to allow zooming. The bitmapped file is then optimized to reduce its size and saved in a suitable format such as JPEG. The JPEG format is a bitmap file format featuring small file size through compression with a selectable level of loss. Because of the small file sizes, the JPEG format is popular on the Internet and in particular is widely supported, *e.g.*, by Web browsers. The JPEG images can be optimized to reduce their size still further, *e.g.*, up to 50%. The resulting image files are archived in persistent storage. (Specification, page 8, line 18 – page 9, line 3.)

Once the image files are formed, they allow viewing of an image of every page in the directory as it is to be printed. However, to be useful, the files should preferably be indexed somehow. In particular, for an online directory, it is desirable to provide a page and category (header) index so that a user can access a particular page by its page number or by a category found on that page. Since it is common for categories to span multiple pages, often each category will be indexed to the first page on which the category occurs. For the electronic billing system, it is desirable to identify the page on which a particular advertisement appears and the page that will be printed on the opposite side of the same sheet in the printed directory; it is also desirable to highlight the position of the advertisement on the page. (Specification, page 10, lines 12-21.)

The directory in persistent storage can be made available to users in any of a variety of ways. The directory can be accessed over a communication network such as the Internet, a LAN, or a VPN (virtual private network). In conjunction with such delivery modes, or as an alternative, the directory can be placed on a computer readable medium such as a CD ROM. One preferred mode of distribution is to install the

directory, via either a network or media, on a LAN server. The LAN server then makes the directory available over the LAN to the users, who view the directory on clients running Web browsers. (Specification, page 12, lines 6-13.) Using a web browser, a user can locate any page in a Yellow Pages directory, either by page number or by heading, and can view that page with various degrees of zooming. (Specification, page 16, lines 1-3.)

VI. ISSUES

1. Regarding independent claim 1, does the Specification meet the written description requirement of 35 U.S.C. § 112, first paragraph, with respect to the claim element of “parsing the page heading to produce an index”?
2. Regarding independent claim 25 does the Specification meet the written description requirement of 35 U.S.C. § 112, first paragraph, with respect to the claim element of “an index representing an organization of the document”?
3. Regarding independent claims 25, and 68 does the Specification meet the written description requirement of 35 U.S.C. § 112, first paragraph, with respect to the claim element of “a capturing device, comprising a capturer and electronic directory host”?
4. Regarding independent claims 1 and 40, does the limitation of “converting the printing data in the print queue into a plurality of viewable files by capturing the printing data from the print queue and not by producing or scanning hard copies of the print data” particularly point out and distinctly claim the subject matter which Appellants regard as their invention as required by 35 U.S.C. § 112, second paragraph?

VII. GROUPING OF CLAIMS

1. Claims 1-12 rise and fall together. *See* Issue Nos. 1 and 4.
2. Claims 25-39 rise and fall together. *See* Issue Nos. 2 and 3.
3. Claims 40-53 rise and fall together. *See* Issue No. 4.

4. Claims 68-84 rise and fall together. See Issue No. 3.

Reasons for separate patentability of the above-indicated Claim Groups 1-4 are presented in the Arguments section pursuant to 37 C.F.R. § 1.192(c)(5).

VIII. ARGUMENT

A. The Rejection Of Claims 1-12, 25-39, And 68-84 Under 35 U.S.C. § 112, First Paragraph, Should Be Reversed.

Section 112, first paragraph, requires that “[t]he specification shall contain a written description of the invention.” 35 U.S.C. § 112. “The written description requirement is separate and distinct from the enablement requirement” of Section 112. (MPEP § 2161 (citing *In re Barker*, 559 F.2d 588, 194 USPQ 470 (CCPA 1977), cert. denied, 434 U.S. 1064 (1978); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1562, 19 USPQ2d 1111, 1115 (Fed. Cir. 1991)). If the Examiner believes that the specification fails to meet the written description requirement, she bears the burden “of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims.” (MPEP § 2163.04.) Moreover, the Examiner should not require that “[t]he subject matter of the claim . . . be described literally (*i.e.*, using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.” (MPEP § 2163.)

Here, the Examiner has done no more than assert (wrongly, as discussed below) that the specification does not describe certain recited claim elements. The Final Office Action provides absolutely no explanation as to why the specification would not have conveyed possession of the invention to one of ordinary skill in the art. At least because the Examiner fails to meet her burden of showing that Appellants have not met the written disclosure requirement of Section 112, the rejection of claims 1-12, 25-39, and 68-84 under Section 112, first paragraph, should be reversed.

Further, Appellants' Specification clearly does meet the requirements of the written description requirement of Section 112, first paragraph. As the MPEP explains:

[T]he fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such

descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). Possession may be shown in a variety of ways including description of an actual reduction to practice, or by showing that the invention was "ready for patenting" such as by the disclosure of drawings or structural chemical formulas that show that the invention was complete, or by describing distinguishing identifying characteristics sufficient to show that the applicant was in possession of the claimed invention. [Citations omitted.]

(MPEP § 2163.02.) As detailed below, Appellants' Specification and drawings leave no doubt that the inventors were in possession of the claimed invention, even if the claims do not always use precisely the same terminology as the Specification. Not only does the Specification completely describe each claim limitation and how each claim limitation is practiced, but it actually gives a detailed account of how the invention was implemented. (See Specification, page 27, line 23 – page 30, line 10.) The drawings (*see, e.g.*, Figs 3, 7, 9, 10) show this implementation, leaving no doubt that Appellants were in possession of the claimed invention.

1. Claim 1: “parsing the page heading to produce an index”

Regarding claim 1, the Examiner takes issue with the claim limitation of “parsing the page heading to *produce an index*.” (Final Office Action, para. 5; emphasis in original.) The Examiner states that “[t]he disclosure does not appear to describe a method for producing an index. The disclosure makes reference to an index on page 10 . . . but does not go into detail as to generating or producing an index.” In fact, the Specification amply supports the limitation of “parsing the page heading to produce an index” as follows:

Once the image files are formed, they allow viewing of an image of every page in the directory as it is to be printed. However, to be useful, the files should preferably be indexed somehow. In particular, for an online directory, it is desirable to provide a page and category (header) index so that a user can access a particular page by its page number or by a category found on that page. Since it is common for categories to span multiple pages, *it is contemplated that each category will be indexed to the first page on which the category occurs*. For an electronic billing system, it is desirable to identify the page on which a particular advertisement appears and the page that will be printed on the opposite side of the same sheet in the printed directory; it is also desirable to highlight the position of the advertisement on the page.

One way to compile the information just described is to provide an interface, called a directory print composition interface, with the system that composed the original EPS representations of the pages. *Such a system typically runs an Oracle DBMS, provided by the Oracle Corporation of Redwood, California, that indexes each advertisement by the spine number of the directory in which the*

advertisement appears, the advertisement number which identifies the advertisement within the directory, the heading (category) under which the advertisement appears and the page on which the advertisement appears when the directory is composed. Such information can be used to match each category with the first page on which it appears, which allows a user to type in a name of a category and be taken to the appropriate page. That information, combined with the rectangle definition file, can be used in the electronic billing system to highlight the specific advertisement. The directory print composition interface should be customizable to accommodate EPS files *and page/advertisement/category indexing data from any directory publisher.* Also, any other source of the needed information can be used, such as a text file of page/heading information or of advertisement rectangle information. (Specification, page 10, line 12 – page 11, line 11; emphases added.)

The specification explains that a category, or header, index allows access to a page by page number or by a category found on the page. This explanation alone is sufficient to have conveyed to one of ordinary skill in the art the means by which the index was produced, and thus that the inventors had possession of “parsing the page heading to produce an index.” Moreover, the Specification also explains that the index can be produced by using well known third party software, the Oracle DBMS, and moreover explains how the Oracle DBMS produces the index. The Specification further explains that the index can be produced by taking indexing data from any directory publisher. Appellants respectfully submit that the above two paragraphs from the Specification are more than adequate to demonstrate possession of the invention recited in claim 1 to one of ordinary skill in the art.

Appellants’ possession of their claimed invention is further demonstrated by explicit statements in the Specification and drawings showing that the inventors had implemented their claimed invention. For example, Figure 3 shows a tree view 329 (see Specification, page 16, lines 1-14) that displays an indexed “heading (category) under which the advertisement appears”. (Specification, page 10, lines 25 – page 11, line 4.) Figure 3 is a screenshot of at least a prototype system, as explained below. Accordingly, one can only conclude that the inventors had possession of a system in which page headings were parsed to produce an index, which was then displayed as depicted in Figure 3. The Specification confirms this conclusion by providing a detailed explanation of the development work done to implement the invention. (See Specification, page 27, line 23 – page 30, line 10.)

In fact, the Specification discloses that the inventors implemented several versions of software specifically reading on the claim limitation of “parsing the page

heading to produce an index". First, the Specification describes a prototype of the inventive system that included a "stand alone Java application called the Heading Parser." (Specification, page 28, lines 5-6.) The Specification goes on to state that "[t]he Heading Parser . . . [has] had minor documentation upgrades and some code streamlining. (Specification, page 30, lines 6-8.) Clearly, the inventors not only were in possession of "parsing the page heading to produce an index", but had implemented that limitation. In sum, the Specification taken as a whole demonstrates that the inventors were in possession of the claimed invention, and moreover the specific description of how the inventors implemented specific claimed features leaves absolutely no room for doubt that the inventors were in possession of "parsing the page heading to produce an index".

Accordingly, claim 1 is in condition for allowance with respect to Section 112, first paragraph. Claims 2-12 were rejected solely by reason of their dependency on claim 1, and therefore also are in condition for allowance with respect to Section 112, first paragraph.

2. Claim 25: "an index representing an organization of the document"

The Examiner incorrectly contends that the inventors did not have possession of the limitation in claim 25 of "an index representing an organization of the document." (Office Action, para. 5.) Referring again to page 10, lines 12-16 of the specification, the Examiner states that "the disclosure does not appear to describe an index representing an organization of the document, but rather [it] is simply described as an integral part of retrieving data."

In fact, the Specification clearly describes an online directory as a multi-page document, and equally clearly describes how an index is used to represent the organization of that document:

Once the image files are formed, they allow viewing of an image of every page in the directory as it is to be printed. However, to be useful, the files should preferably be indexed somehow. In particular, for an online directory, it is desirable to provide a page and category (header) index so that a user can access a particular page by its page number or by a category found on that page. Since it is common for categories to span multiple pages, it is contemplated that each category will be indexed to the first page on which the category occurs. (Specification page 10, lines 12-18.)

At a minimum, the Specification describes an index representing the organization of a document by page number or a category. Furthermore, Figure 3, showing an

implementation of the invention as discussed above, clearly shows a document indexed by page number. (*See, e.g.*, Fig. 3, elements 313, 315, and 317.) Thus, there can be no doubt that the inventors were in possession of “an index representing an organization of the document.”

Accordingly, claim 25 is in condition for allowance. Claims 24-39 were rejected solely by reason of their dependency on claim 25, and therefore also are in condition for allowance.

3. Claims 25 and 68: “a capturing device, comprising a capturer and electronic directory host”

The Examiner further incorrectly contends that the inventors did not have possession of the limitation in claims 25 and 68 of “a capturing device”. (Final Office Action, page 3.) But, as the Examiner acknowledges, the Specification, at page 11, line 22, discloses “a capturer/electronic directory packager host.” (Final Office Action, page 3; *See also* Fig. 2, element 211.) Appellants believe that it is clear from the Specification that the “capturing device” recited in claims 25 and 68 comprises the “capturer/electronic directory packager host” disclosed in the Specification. As noted above, the MPEP makes clear that the language of the specification need not precisely match the claim language. Nonetheless, in their March 24, 2004 Amendment pursuant to 37 C.F.R. § 116, Appellants amended claims 25 and 68 to explicitly recite that the capturing device comprises a “capturer and electronic directory host”. Appellants replaced the “/” character used in the specification with the word “and” to avoid any question about whether the “/” character makes the phrase “capturer/electronic directory host” indefinite under 35 U.S.C. § 112, second paragraph; as Appellants made clear in their March 24, 2004 Remarks they did not intend any change in meaning be introduced into the phrase. Indeed, Appellants’ only intent, as should be clear from the plain language of claims 25 and 68, is to capture the subject matter disclosed in their Specification.

Accordingly, claims 25 and 68 are condition for allowance. Claims 24-39 were rejected solely by reason of their dependency on claim 25, and therefore also are in condition for allowance. Claims 69-84 were rejected solely by reason of their dependency on claim 68, and therefore also are in condition for allowance.

B. The Rejection Of Claims 1-12 and 40-53 Under 35 U.S.C. § 112, Second Paragraph, Should Be Reversed.

Claims 1-12, 20, 40-53, 57-60, and 71-74 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellants regard as the invention. (Final Office Action, para. 7.) Claims 20 and 57-60 have been cancelled, and therefore Appellants presume that the Examiner did not intend to include a rejection of claims 20 and 57-60 in the Final Office Action, even though paragraph 7 of the Final Office Action refers to them. Further, claims 71-74 depend from independent claim 68, which the Final Office Action did not reject under the second paragraph of Section 112, and Appellants therefore assume that the Examiner did not intend to include a rejection of claims 71-74 in the Final Office Action, even though paragraph 7 of the Final Office Action refers to them.

The Examiner alleges that claims 1 and 40 contain a vague limitation: “converting the printing data in the print queue into a plurality of viewable files by capturing the printing data from the print queue and not by producing or scanning hard copies of the print data”. (Office Action, para. 7.) The Examiner does not explain how or why the claim language is vague. Rather, the Examiner’s reasoning appears to fall under the enablement requirement of the first, and not the second, paragraph of Section 112 inasmuch as the essence of the Examiner’s argument is that the claim language is not supported by the Specification. The Examiner states that:

The disclosure makes reference to “the converter/archiver host 217 converts the E[P]S files into image files” note page 12. The added limitation is vague and the conversion process does not appear to correspond with page 9 lines 15-20 description of a *converter program* running in the batch mode or **page 11-12 converter/archive[r] host** that converts the data. The disclosure does not appear to state that the conversion takes place in the print queue. (Emphases in original.)

The Examiner misreads the plain language of the claims inasmuch as claims 1 and 40 do not recite conversion taking place *in* a print queue but rather that conversion of printing data that is in a print queue occurs by taking the data *from* the print queue. Specifically, the claims recite that conversion occurs by “capturing the printing data *from* the print queue.” Moreover, the claim language is supported by the Specification, which discloses that “[e]ach EPS file comes out of the virtual print queue.” (Page 9, line 10; *see also* page 11, line 23 – page 12, line 2.) The Specification further explains that it is files

taken from the print queue (page 9, lines 9-10) that are converted (Page 9, lines 17-19). Accordingly, claims 1 and 40 are clearly supported by the Specification.

Not only are they supported by the Specification, but claims 1 and 40 unquestionably particularly point out and distinctly claim Appellants' invention in reciting "converting the printing data in the print queue into a plurality of viewable files by capturing the printing data from the print queue and not by producing or scanning hard copies of the print data". The test for whether claim language meets the Section 112 requirement of clarity and precision is whether one of ordinary skill in the art would understand what constitutes infringement. (*See* MPEP § 2173.02 and cases cited therein.) Here, one of ordinary skill is given clear notice that "converting the printing data in the print queue into a plurality of viewable files by capturing the printing data from the print queue" would meet a requirement of claims 1 and 40. One of ordinary skill is further given notice that "converting the printing data in the print queue into a plurality of viewable files by . . . producing or scanning hard copies of the print data" would not constitute infringement. The Examiner has not pointed to any claim terms that are vague, or would not be understood by one of ordinary skill in the art. Claims 1 and 40 clearly meet the requirements of Section 112, second paragraph.

For the foregoing reasons, claims 1 and 40 are in condition for allowance. Claims 2-12 were rejected solely by reason of their dependency on claim 1, and therefore also are in condition for allowance. Claims 41-53 were rejected solely by reason of their dependency on claim 40, and therefore also are in condition for allowance.

IX. CONCLUSION

In view of the foregoing arguments, Appellants respectfully submit that the pending claims satisfy the requirements of 35 U.S.C. § 112. In view of the above analysis, a reversal of the rejections of record is respectfully requested of this Honorable Board.

Appellants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 07-2347, under Order No. 00-VE20.56 from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to the above account.

Dated: June 21, 2004

Respectfully submitted,

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